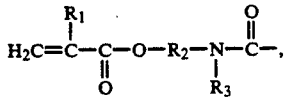
pentanediyl, neopentanediyl, hexanediyl, 2,3-dimethylbutanediyl, methylethanediyl, propanediyl and ethanediyl. Ethanediyl and propanediyl are the preferred divalent radicals.

A monovalent aliphatic C_1–C_4– radical (R_3) in general denotes a straight-chain or branched hydrocarbon radical having 1 to 4, preferably 3 or 4, carbon atoms. The following alkyl radicals may be mentioned as examples: methyl, ethyl, propyl, isopropyl, butyl, isobutyl and tert.-butyl. tert.-Butyl and isobutyl are particularly preferred.

Z in the context of the general formula (I) denotes hydrogen (H) or an N-alkyl-N-(meth)acryloyloxyalkylcarboxamide of the formula

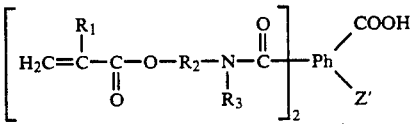


wherein R_1, R_2 and R_3 have the meanings given, or also COOH, if Y also denotes COOH.

Y can also represent, in addition to COOH, an anhydride group if the two radicals containing Y are bonded to adjacent positions on an aromatic. Adjacent here means ortho-positions in the benzene or naphthalene nuclei and the α-positions (1,8- or 4,5-substitution) in the naphthalene nuclei.

Ph denotes a benzene nucleus which is trisubstituted by X and Y in the 1,2,3- or 1,2,4-position or tetrasubstituted by X, Y and Z in the 1,2,4,5-position, or a naphthalene nucleus which is trisubstituted by X and Y in the 1,2,6-, 1,4,5- or 2,3,6-position or tetrasubstituted by X, Y and Z in the 2,3,6,7- or 1,4,5,8-position.

Preferred compounds in the context of the formula (I) correspond to the formula (II)



in which

R_1 denotes hydrogen or methyl,

R_2 denotes a divalent aliphatic radical (C_2–C_6),

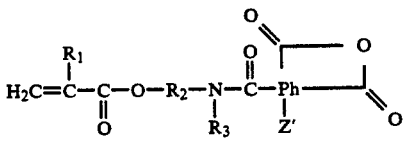
R_3 denotes a monovalent aliphatic radical (C_1–C_4),

Z′ denotes hydrogen or COOH

and

Ph represents a tri- or tetrasubstituted benzene ring (1,2,3-/1,2,4- or 1,2,4,5-substitution) or a tri- or tetrasubstituted naphthalene ring (1,2,6-/1,4,5-/2,3,6-/1,4,5,8- or 2,3,6,7-substitution).

Another preferred group of compounds of the formula (I) corresponds to the formula (III)



(III)

in which

R_1 denotes hydrogen or methyl,

R_2 denotes a divalent aliphatic radical (C_2–C_6),

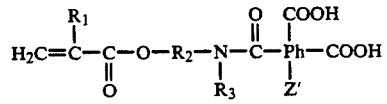
R_3 denotes a monovalent aliphatic radical (C_1–C_4),

Z′ denotes hydrogen or COOH

and

Ph represents a benzene ring which is tri- or tetrasubstituted (1,2,3-/1,2,4- or 1,2,4,5-substitution) or a tri- or tetrasubstituted naphthalene ring (1,2,6-/1,4,5-/2,3,6-/1,4,5,8- or 2,3,6,7-substitution).

A particularly preferred group of compounds of the formula (I) corresponds to the formula (IV)



(IV)

in which

R_1 denotes hydrogen or methyl,

R_2 denotes a divalent aliphatic radical (C_2–C_6),

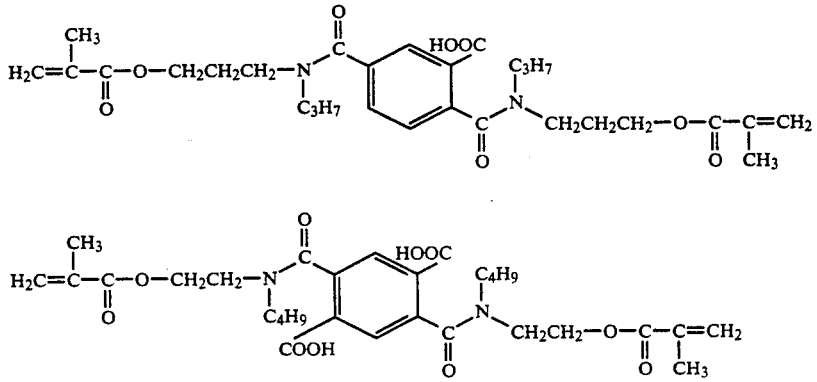
R_3 denotes a monovalent aliphatic radical (C_1–C_4),

Z′ denotes hydrogen or COOH

and

Ph represents a tri- or tetrasubstituted benzene ring (1,2,3-/1,2,4- or 1,2,4,5-substitution) or a tri- or tetrasubstituted naphthalene ring (1,2,6-/1,4,5-/2,3,6-/1,4,5,8- or 2,3,6,7-substitution).

The following N-alkyl-N-(meth)acryloyloxyalkylcarboxamides may be mentioned specifically as examples:



(X)